

PRODUCER REPORT

Landowners Derbyshire Delight:

“Biggest and best ever” is how Andrew Shuker describes his crops

Farming at Fernilee, near Whaley Bridge, Derbyshire, Andrew has always sought to optimise the use of home-produced forage. He uses wholecrop wheat and grass silage as the main-stay of the winter ration of the 180-strong herd of commercial Holstein/ Friesians.

As on most dairy units, a major challenge for this farm has always been the disposal of slurry, not only in terms of applying the product in good ground conditions but the inherent problems caused by luxurious uptake of N midseason. This was a constant cause of spoiled silages due to excessive N as free ammonia.

Application of the slurry starts as soon as ground conditions allow, usually early March, with 1500g/acre applied to the silage ground; for wholecrop this is done prior to drilling, also at 1500g/acre, with Consort being the chosen wheat variety. The farm is well served with a 450,000 gallon (2m litre) slurry store, adequate storage for 5 months during the critical winter period.

Traditionally the farm was a regularly user of granular urea in conjunction with the nitrogen inhibitor, Save N to control the breakdown of fertiliser ammonia nitrogen as well as the massive amounts of N applied in the slurry. For the past 4 years Andrew has become an enthusiastic user of contract applied liquid compound fertiliser mixed with Save N. Apart from a great improvement in silage quality, this has brought many other benefits.

“We were always short of labour at the time we needed to apply the fertiliser, so to have a contractor in with the right kit, to do the job in a timely manner is a big advantage. What used to take us 5 days is now done by the contractor in one. With a sprayer the job is done very accurately with no waste at the headland and no overlapping. We are also saving the application cost of the Save N as a separate dressing, as it is included in the liquid application” – Andrew Shuker

**Summary**

Improved forage quality on all crops
No waste due to “free” ammonia
Discipline of timely application
Even application gives more uniform crops
Addition of sulphur optimises N uptake

Contractors Simisters of Ellastone apply Landowner 20:2:3 plus sulphur with Save N to give 130:13:21 units NPK per acre. “This provides all of the nutrients for the first cut plus about 50% of the N for the second. The same dressing is applied to the wholecrop wheat.”

There are 2 major advantages of this system on grassland, explains Steve Jackson of Landowner Fertilisers. Firstly, the Save N causes a release of N to the crop in line with crop need which dramatically reduces leaching losses. The farmer can then be confident of cutting his crops whenever he wants to, without the risk of high free ammonia levels to spoil the silage, the N is converted to protein rather than ammonia N. Also, by applying enough N for some carry-over we ensure the very best start for the next crop as there is always available N in the moist roost area to re-grow the second cut with no interruption in N supply. This is worth about 2 weeks extra growth on most farms.

Fertiliser application for second cut is then a relaxed affair, with no rush to apply as the crop is already growing; Andrew uses farm labour to apply Kaynitro at about 40 units N per acre, plus K. The plan at Fernilee is to crop 10t of fresh grass at first cut, all of which is stored in the new covered silage store to a depth of 16 feet, another investment with which Andrew is very pleased.

<u>ANALYSIS RESULTS 03:</u>	First Cut	Second Cut
DM	28.5	23.13
C Protein	13.5	13.1
ADF	32.23	34.28
NDF	53.96	58.82
ME	10.67	10.3
D. Value MJ/Kg	66.66	64.36
Ammonia N	5.31	2.13
pH	4.12	3.72